

Analytical Laboratory Report

Client: Companhia Docas do Estado de São Paulo - CODESP

Collected By: Rafaela Emiko

Project: Water Supply and Sewage Collection - Santos Port

Project Number: Contract DIPRE/04.2020

Date Collected: 02/06/2020

Time Collected: 9:55 AM

Sample Identification: Treated Water at Saboo
Treatment Plant

Report Number: RE006/2020-0

PARAMENTERS	ANALYSIS DATE	RESULT	LQ	METHOD	PRC Nº5/2017 - VMP
Total Alkalinity (mg/L CaCO ₃)	03/06/20 16:44	7,0	/	SMWW Method 2320 B	/
Total Acidity (mg/L CaCO ₃)	03/06/20 15:35	3,9	/	SMWW Method 2310 B	/
Aluminum (mg/L Al ³⁺)	08/06/20 15:00	0,003	/	ME - 003 Rev. 01	0,2
pH (-)	02/06/20 10:00	7,11	2 - 13	SMWW Method 4500 H ⁺ B	6,0 a 9,5
Chloride (mg/L Cl ⁻)	04/06/20 15:50	6,2	1	SMWW Method 4500 Cl ⁻ B	250
Residual Free Chlorine (mg/L Cl ₂)	02/06/20 10:00	1,67	0,1	ME - 006 Rev. 05	0,2 - 5,0
Residual Total Chlorine (mg/L Cl ₂)	02/06/20 10:00	1,76	0,1	ME - 006 Rev. 05	/
Conductivity (µS/cm)	02/06/20 10:00	35,8	1	SMWW Method 2510 B	/
Total Coliform (P/A)	02/06/20 10:40	Absence	/	SMWW Method 9221 D	Absence
Color (CU)	02/06/20 10:30	<5	5	SMWW Method 2120 C	15
Total Hardness (mg/L CaCO ₃)	05/06/20 16:30	4,3	2	SMWW Method 2340 C	500
Escherichia coli (P/A)	02/06/20 10:40	Absence	/	SMWW Method 9221 F	Absence
Total Phosphorus (mg/L PO ₄ ³⁻)	08/06/20 12:30	< 0,2	0,2	ME - 016 Rev. 04	/
Total Iron (mg/L Fe)	08/06/20 16:20	< 0,1	0,1	ME - 013 Rev. 05	0,3
Fluoride (mg/L F ⁻)	02/06/20 10:37	0,71	0,2	SMWW Method 4500 F ⁻ D	1,5
Total Manganese (mg/L Mn)	08/06/20 14:15	< 0,1	0,1	ME - 017 Rev. 01	0,1
Nitrate (mg/L NO ₃ ⁻ - N)	03/06/20 15:00	< 1,0	1,0	ME - 018 Rev. 01	10
Nitrite (mg/L NO ₂ ⁻ - N)	03/06/20 16:00	< 0,1	0,1	ME - 019 Rev. 04	1
Silica (mg/L SiO ₂)	05/06/20 14:00	11,83	/	ME - 024 Rev. 00	/
Total Dissolved Solids (mg/L)	02/06/20 14:00	18,2	/	SMWW Method 2540 C	1000
Sulfate (mg/L SO ₄ ²⁻)	04/06/20 16:00	0,0	/	ME - 026 Rev. 00	250
Hydrogen Sulphide (mg/L S ²⁻)	04/06/20 17:00	0,010	/	ME - 028 Rev. 00	0,1
Turbidity (NTU)	02/06/20 10:07	<0,5	0,5	SMWW Method 2130 B	5
Zinc (mg/L Zn)	09/06/20 08:30	< 0,2	0,2	ME - 030 Rev. 00	5

On the basis of the above test result(s), this water sample of Ministério da Saúde (Health Ministry) for **POTABLE WATER**

DOES MEET

Portaria de Consolidação Nº5/2017

The following notes apply to this sample:

- 1) Analysis Undertaken as basic methodology described in the "Standard Methods" 23th edition.
- 2) The results of that analysis has restricted meaning and apply only to sample

Santos, June 09, 2020

Responsible for report:



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Technical Manager
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